

WHAT IS CLAIMED IS:

1. An image navigation module for an optical mouse,
comprising:

5 a module unit in which a light emitting element and a
sensor die are constructed on a board in a chip-on board
manner; and

 a lid type prism-integrated lens put on the board to
cover regions where the light emitting element and the sensor
10 die are constructed.

2. The image navigation module as set forth in claim 1,
wherein the sensor die is a single chip sensor into which an
image sensor for detecting light converged by the lid type
15 prism-integrated lens and a Main Control Unit (MCU) for
processing detected signals are integrated.

3. The image navigation module as set forth in claim 1,
wherein the lid type prism-integrated lens includes a first
20 lens surface for converging light irradiated from the light
emitting element, a reflection surface for reflecting the
converged light, and a second lens surface for converging
light.

25 4. The image navigation module as set forth in claim 3,

wherein the sensor die and the light emitting element are formed on a lower surface of the board, the reflection surface and first lens surface of the lid type prism-integrated lens are formed to be located below the light emitting element, and
5 the second lens surface is formed to be located below the sensor die.

5. The image navigation module as set forth in claim 4, wherein the reflection surface is formed to be inclined at an
10 angle that is capable of reflecting the light irradiated from the light emitting element toward a contact surface outside of the optical mouse.

6. The image navigation module as set forth in claim 3,
15 further comprising a light interception plate located between the light emitting element and the sensor die to prevent the light irradiated from the light emitting element from being directly incident on the sensor die.

20 7. An optical mouse having an image navigation module, the image navigation module comprising:

a module unit in which a light emitting element and a sensor die are constructed on a board in a chip-on board manner; and

25 a lid type prism-integrated lens put on the board to

cover regions where the light emitting element and the sensor die are constructed.